

Eugene schools turn food scraps into compost and crops.



# **School Training Manual**



#### **Love food. Not waste.** Food waste is a universal challenge.

The good news: you have an opportunity to minimize food waste, in turn lowering purchases – all without running out of food, sacrificing quality, or compromising on food safety. The key is to raise awareness about food waste among all school staff and students, and develop a structure to separate food waste that works best for your school.

# REDUCE

Do you really need to purchase that much food? Will all of the food you prepare be consumed by your students and staff?

### RESCUE

Consider local options for repurposing unused food. Can the unused food be donated to feed people or animals?

# RECYCLE

Can the food go into composting bins or collected elsewhere?

# Start with food waste prevention.

You can dramatically reduce food waste by getting students and staff to think about waste on a daily basis to understand how and why to avoid it. This manual is not a onesize-fits-all approach – it is a collection of ideas that are currently working for participating schools. These are ideas you can try out at your school as you move forward with your program.



#### Start food waste composting.

This manual describes a few options to start a successful food waste collection and composting program for your school. These steps will walk you through the recommended order for rolling out a commercial compost program at your facility. Consider incorporating the information from this manual into parts of your curriculum. If you are in 4j or Bethel School District, you can work with your district's Energy and Water Education Program Coordinators to implement a waste prevention curriculum in your classrooms. You can also work with local nonprofits to help educate students about how to compost. We suggest you review compost expectations whenever you cover safety or sanitation reminders with students and staff.

#### Thank you for participating in this program!



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#### Chapter 1: BACKGROUND & OVERVIEW

#### Why Commercial Compost?

Whether or not your school already has garden space to compost food scraps, adding a commercial bin to include additional food scraps that may include meat, bones, and dairy is a great option. With LFNW, you will receive an enclosed exterior bin, or "roll cart," to be placed in your current garbage enclosure. These bins are cleaned out by the garbage haulers after each pick up, and can be locked for your convenience.



#### How to Get Started: Creating Your Team

Schools are in the unique position of determining a structure that works best for your specific location – every school is different. It is essential for the success and sustainability of this program that you develop, train, and maintain a core group of staff (and oftentimes students) that are invested in the program.

The following staff should be involved to ensure the success of the program:

Principal Custodial staff Cafeteria staff Lead teacher(s)

Schools that choose to compost with students will often develop a Green Team structure that can be applied to this program. The Green Team ensures that waste is being handled properly in all aspects of the school. Want to learn more about green teams? Partners for Sustainable Schools is a great resource: www.partnersfor sustainableschools.org or 541-636-0096



#### Why bother?

#### You have a hand in helping our environment.

When thrown away, food scraps end up in the landfill where they produce methane, a greenhouse gas emission 23 times more powerful than carbon dioxide. The release of methane into the atmosphere has a big impact on our environment.

#### The same food scraps can be used to create

**compost,** a nutrient-rich soil amendment that is valued by school gardens, home gardeners, farms, and other businesses that contribute to the vitality of our community.

**Eugene throws over 20,000 tons of food waste into the landfill each year**, half of which comes from commercial accounts, including schools. In collaboration with garbage haulers and local composting facilities, the City has developed this program to use food waste to create compost, instead of decaying in the landfill.



#### Contamination=Landfill

# Keep compost quality high by keeping out contamination.

Food scraps are transformed into nutrient-rich compost by local composting facilities. This can only happen if composters receive food waste that does not have contaminants.

Materials that do not compost impact composting operations. Contaminated food waste from schools can result in an unusable product that will be landfilled. Contaminants can also harm compost facility employees and composting equipment.



Food scraps can be turned into compost by local composting facilities, but contamination can increase the cost of service.

Small milk cartons are not compostable or recyclable in our comingle system. Although there may be ways to recycle milk cartons in Oregon, this must be done on a per-case basis.



#### Chapter 2: COMPOSTING WITH DESIGNATED STAFF ("Back of the House")

#### STEP 1

#### **Check in before throwing in.** No Glass, Plastic, Metal, or Service Ware

If you are using compostable liner bags, take the following steps to transfer your compostable waste from the interior bins to the exterior roll carts:

Please only use BPI certified compostable bin liners.

Please review the next page on what can / cannot be composted.

### Important: Do not close compostable bags with knots or ties.

Instead, please twist or fold to close.

Why? Knots create thick layers of material that do not compost completely in commercial composting facilities.

# What you CAN compost: FOOD ITEMS

Meat	Plate Scrapings	Bones
Dairy Products	Baked Goods	- Control Cont

# PLANTS



Plant Trimmings



# What you CANNOT compost:

Liquids

Cooking oil

Paper coated w/ plastic or foil

**Milk Cartons** 

Standard or Waxed Cardboard Boxes

ANY serviceware (cups, plates, forks, etc.) Food-soiled paper (paper towels, napkins, etc.)

Yellow & brown grease

Offal & byproducts from animal processing

Non-biodegradables (plastic, Styrofoam, etc.)

Commercially compostable serviceware

## MAKE BINS EASY TO FIND!

#### STEP 2

#### Locate green interior food waste collection bin(s) in the following areas:

# Encourage full separation of food waste by limiting the availability of garbage cans.

To gain the most from the program - make sure to have enough food waste bins to handle the amounts of waste being created AND do not put trash cans in areas without a food waste bin. Pair food waste bin(s) with trash and recycling bins.

It is essential to let custodial and cafeteria staff set up a system that works best for them. Work with staff leads to determine a structure that works for your facility, and then determine how best to share the structure and explain the new program to other staff, especially teachers that work in the cafeteria during lunch, student workers, and school administration.





### Label Bins

Affixing appropriate signage to food waste collection containers.

### Bin Placement

North Eugene culinary arts student prepare meals.

## Cleaning Up

Spencer Butte custodial staff alternates cleaning bins with Green Team students.

# MAKE IT EASY TO LEARN!

#### STEP 3

Add posters in highly visible locations to raise awareness and provide clear direction to your front line team.

Make sure the green food waste collection bin(s) are clearly marked with signage:



# Place posters in high traffic areas such as the kitchen and the employee break room.

The posters show what materials can and cannot be composted. Pair your posters with food waste collection bins. This is the most important thing for your team to know.

Notes:





Schools turn your food scraps into compost & crops.

#### REDUCE

Take only the amount of food you can eat so your leftovers are not wasted.

#### RESCUE Place unopened pace

foods in the 'No, thank you' bins so it can feed others.

#### RECYCLE

Place all leftover food in the cafeteria compost bins.

# All Food

- Fruits
- Vegetables
- Meat
- Chicken
- Fish
- Bones
- Rice
- Beans
- Noodles
- Bread
- Cheese
- Eggshells
- Etc.



- No Napkins or Paper Towels
- No Disposable
   Cups
- No Plastic or Compostable Forks and Spoons
- No Glass
- No Metal Cans or Utensils



For more information on the Love Food Not Waste program, contact the City of Eugene:

#### 541-682-6842

wasteprevention@ci.eugene.or.us

Toda la Comida

- Frutas
- Verudas
- Carne
- Pescado
- Mariscos
- Huesos
- Arroz
- Frijoles
- Fideos
- Pan
- Queso
- Cásara de Huevo
- Etc.



- **No** Toallas de Papel, Servilletas
- No Vasos
   Desechables
- No Plástico
- No Vidrio
- No Metales

Our School Waste
Reduction Coordinator is:
Name:

Phone:	

or visit online at: www.eugenerecycles.org

# MAKE IT EASY TO DO!

#### STEP 4

#### Start separating your food scraps!

**Kickoff your composting program with employee training.** Discuss the new effort at your pre-shift meeting and maintain lots of visibility every day while the teams form new composting habits. Post signs that say "composting begins today" to raise awareness.

To maintain a clean, odor-free environment in your facility, expect to empty the contents of interior bin(s) on a regular basis, and wash the bins and/or use BPI certified compostable bin liners.

If space/facility limits easy bin cleaning and you do not want to use compostable liners, consider using paper bags or lining the bottom with newspapers to collect liquid.

If you use traditional plastic bin liners recognize they are not compostable and cannot be tossed into your exterior cart with your food waste. Place all conventional plastic liners in the trash for disposal.

**Food waste is heavy,** so empty bins often. We also recommend using 5-gallon buckets if bin weight is a concern.

**Be sure to keep the bins clean,** just as you would any garbage container – this will minimize potential odors and avoid attracting pests.

#### Monitor your interior bin(s)/exterior cart!



Work with your hauler to adjust pick-up of exterior cart



Check interior bin(s) and external carts for contamination with non-compostable items (e.g. plastic, glass, metal). Pull out these items and discuss with staff.



## **MAKE IT FUN!**

## STEP 5

# Encourage staff to consistently participate in the program.

#### With the implementation of any new program,

a manager/supervisor may face questions or low motivation from employees who are skeptical or concerned about how the effort may negatively impact their work. The key is to communicate that compost collection is not only an easy thing to do but a vital part of their job, and it offers each team member a great opportunity to be stewards of their environment and community.

Here are 3 ways to make this program fun:

#### Designate a compost champion!

While participation from all employees is vital to the success of this program, we encourage you to select one team member to serve as a compost champion – an employee on each shift that will answer any staff questions, encourage participation, and ensure quality (e.g., monitoring bins for contamination!). Encourage employees to volunteer to be a compost champion during each shift.

2 Monitor how much food waste has been separated for compost on a monthly basis. You can work with your hauler or contact the City for details and post it in your school's cafeteria so students and staff can see how much food waste they have composted.

#### **3** Consider organizing a staff field trip. Visit Rexius' composting

facility to see how your school's food waste turns into compost.

#### **REXIUS** 541–342–1835 www.rexius.com



#### Chapter 3: GROWING YOUR PROGRAM: COMPOSTING WITH STUDENTS AND ALL STAFF ("Front of the House")

## **BEST PRACTICES**

# Staff training: When to roll out an expanded program

Ideally, some schools will make the decision to open up the commercial composting option to students in the cafeteria as well as in the school's kitchen. Teachers can help explain composting to students, and can incorporate aspects of the composting cycle into their curriculum.



### Student training: In-school instruction

#### Once staff are trained, it's time to engage

**students.** When opening up the program to students, it is ideal to teach every student in the school about the program at one time. This can be during an in-class assembly or during a short classroom demonstration with a staff member. See the Adams Elementary School Spotlight on the next page for how they engaged students in the beginning of the year.

Who will empty the internal food waste bins into the exterior one?
Do you have a strategy to deal with an overflowing compost bin?
What communication tactics do you have in place to ensure staff and students identify roles and responsibilities?
Do you have enough signs? Are they consistent?

# School Spotlight ADAMS ELEMENTARY

Before implementing LFNW, students at Adams Elementary filled four garbage cans at lunch; since implementing the program they are down to only 1½–2 cans!

#### **Keys to Success:**

- Prior to school starting, the LFNW trainer gave an overview of the program to the school's staff.
- The Principal took time to explain the program to each class, including what goes in the LFNW bin, how to compost, and the connections between the school's garden and the food waste program.
- Each classroom developed a strategy for dumping the compost— generally a student is assigned to take out the compost at the end of the day.





- Consistent-looking green buckets
   are used in each classroom to collect snack waste.
- Older students serve as the "Green Patrol" and help monitor compost and recycling efforts.

#### Challenges:

- Monitoring and working to eliminate odor problems in the warmer months of the school year.
- Ergonomics of lifting the internal bins into the external one we recommend an adult lifting the bins and/or using 5-gallon buckets for the heaviest material.

# IDEAS FOR ENGAGING STUDENTS



#### Compete

Make a competition between grade levels to divert the most weight in food scraps in the shortest time. Determine a goal for which class can get to XX number of points first. Offer prizes and incentives.

#### Discuss

#### Provide in-classroom talks regarding the importance of composting and the environment; relate it to home gardening or school gardening

(many students are familiar with some aspect of growing food at home or in school.) Visit schoolgardenproject.org for science based garden and compost curriculum.

#### Train

Provide training for classified staff (cafeteria monitors) to ensure they know what can/cannot be composted. Then, these staff can engage students to help them when there is confusion about what to throw where. On certain days, staff can give students a prize for doing the right thing.

#### **Get Involved**

**Participate in a local or national event with an emphasis on LFNW.** Three fantastic outlets are America Recycles Day (Keep America Beautiful), International Compost Awareness Week (U.S. Composting Council), and Green Apple Day of Service.

#### **Continuing Education: Sample** Lessons for the Classroom

Bring in a compost bucket labeled with LFNW stickers, a recycling bin, a trash can, and a variety of compostable, non-compostable, and recyclable items (sandwich bags, milk cartons, yogurt containers, and chip bags are great examples of common items students see at lunch!) Begin by asking students why compost is important.

#### Answers:

- Replaces nutrients lost from the soil due to harvest/erosion
- Eliminates the need for petrochemical fertilizers
- Reduces greenhouse gas (GHG) emissions associated with landfills (i.e. methane from decomposing organic matter)



School Garden Project offers a free, online curriculum for teachers that includes lessons on compost, soil, and nutrients.

Find out more at schoolgardenproject.org or call 541-284-1001.

Offer the following options to tie it all together.



### Tying it together

- **1** Bring the lesson back to where food comes from, and use the example of asking a student what they had for lunch/breakfast and break down the ingredients: it all comes from farms and farms need to replace nutrients to grow enough good crops so that we can have food. Additionally, soil erosion means we lose even more nutrients!
- 2 **20,000 tons of food waste goes into Lane County's landfill every year**; this produces methane gas which is 23 times more harmful than carbon dioxide (CO2 is produced as a by-product of the composting process.)
- 3 Have the students sort the compostable, recyclable, and trash items into the correct bins.

Bring in a variety of items to separate, and provide consistent-looking bins for students to self-sort their trash, recyclables, and food waste

- Get a sample of LFNW compost and show it to the students. Talk about observations made during the three-month composting process (Does it smell? Can you see any food anymore?); compare that to a bag of trash that has sat for three months.
- 5 What does organic mean? The most common answer is that food has not been sprayed with pesticides. In science, organic means something that is living or was once alive. Inorganic matter is manmade (non-carbon based) and has been isolated from another compound. Any organic matter can go into the commercial compost system.

#### We're here to help!

We want this program to be a success for your business and for the community. For questions or additional resources, please contact the City at:

#### wasteprevention@ci.eugene.or.us

phone: **541-682-6842** visit us online: **www.eugenerecycles.org** 

Energy and Water Conservation staff in 4j and Bethel School Districts can assist district schools directly with operational help and curriculum development.

To contact 4J Energy and Water Conservation staff, call: 541-790-5533

To contact Bethel Energy and Water Conservation staff, call: 541-607-9701 x2615

The garbage haulers in Eugene are set up to help you determine an appropriately sized container for your facility, in addition to the frequency of pick up.



Eugene

Eugene's Commercial Food Waste Composting Program